

Present neatly. Justify for full credit. ~~No Calculators.~~

Name \_\_\_\_\_ Score \_\_\_\_\_ 15 minutes

1)

Using a trapezoidal sum with six subintervals, estimate the area that the graph of  $f(x) = e^x$  forms with the horizontal axis and the lines  $x = 1$  and  $x = 4$ . Sketch the region and show work leading to your answer.

2) [Short Essay]

We have recently introduced four methods of approximates areas under the curve. In a few complete sentences, compare the relative accuracy of each approximation method. Are there certain graph criteria for which one method performs best?

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